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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,645	10/20/2003	Jean-Christophe Simon	237054US0	1828

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EXAMINER	
MERCIER, MELISSA S	

ART UNIT	PAPER NUMBER
1615	

NOTIFICATION DATE	DELIVERY MODE
05/04/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/687,645	SIMON ET AL.	
	Examiner	Art Unit	
	Melissa S. Mercier	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) *7-9,17-19 and 44-46* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,10-16 and 20-43* is/are rejected.

7)☒ Claim(s) *11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 3 pgs.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I, the species of photo chromic dye corresponding to formula I, and a multilayer interference structure, for the goniochromatic coloring agent, in the reply filed on February 21, 2007 is acknowledged. The examiner has withdrawn the specific multilayer inference structure election requirement. The traversal is on the ground(s) that there is no search burden on the examiner. This is not found persuasive because the different combinations of substituents result in materially different compounds with different classifications and require different searches.

The requirement is still deemed proper and is therefore made FINAL.

Claims 7-9, 17-19 and 44-46 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected Group and Species, there being no allowable generic or linking claim.

Priority

Applicants claim of priority to US Provisional Applications 60/434,410 and 60/434,409 both filed on December 19, 2002, and French Applications 0213038 and 0213036 both filed on October 18, 2002 is acknowledged.

Information Disclosure Statement

Receipt of the Information Disclosure Statements filed on August 11, 2005, October 12, 2005, November 4, 2005, and April 6, 2006 is acknowledged.

Oath/Declaration

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

Claim Objections

Claim 11 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 1 recites the limitation "at least two dyes" and then further limits one of them to a photo chromic dye, therefore, it is the examiners position that claim 11 does not further limit the scope of the claim by the recitation "combining the photo chromic dye with at least a second dye".

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 1-6, 10-16, and 20-43 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The location of R_7 is unclear according to formula (I). The examiner has interpreted the drawing to indicate R_7 can be at any open position on the core structure.

It is additionally unclear what "the difference in hue ΔE at least equal to 5". It is unclear what applicant is comparing the hue to.

Regarding Claim 13, it is unclear to the examiner if the second dye is 0.1-60% by weight or the total amount of dye in the composition is 0.1-60%, relative to the total weight of the composition.

Regarding Claims 15-16, it is unclear to the examiner what a multilayer interference structure is. The specification has not provided a definition as to the meaning, structure, or properties thereof.

Regarding Claims 25 and 27, it is unclear what applicant is claiming by"apolar" oil. The examiner is interpreting this to be non-polar oil. A through review of the specification did not result in the finding of a definition of the term.

Regarding claim 29, the phrase "especially" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 43 recites the broad recitation "said filler is present in a proportion of from 0.01-60% by weight", and the claim also recites "an in particular from 3-10% by weight" which is the narrower statement of the range/limitation. It is further unclear what the filler is in proportion with.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

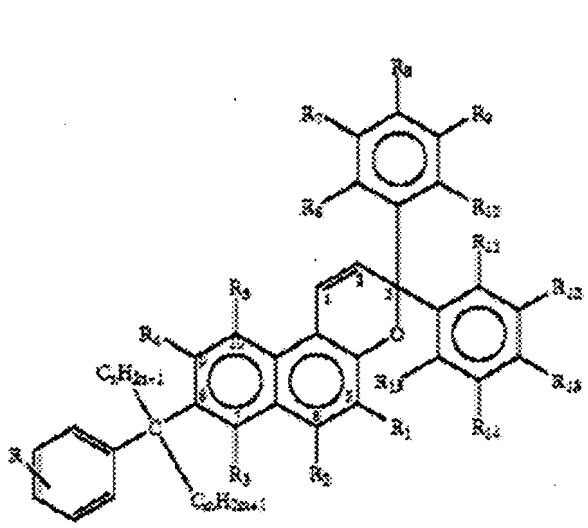
The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-6, 10-12, and 20-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krongauz et al. (US Patent 6,627121) in view of Lagrange (US Patent 6,123,952).

Krongauz discloses a photo chromic naphthopyran of the formula:



wherein R1 through R15, which may be the same or different, are independently selected from the group consisting of hydrogen, C1 -C4 alkyl, C1 -C4 alkoxy, halogen, C1-C4 alkylcarbonyloxy, benzoyloxy, C3-C6 cycloalkyl, phenyl, and NR16 R17, wherein R16 and R17 are each C1-C4 alkyl or together with the N atom form a 5-12 membered monocyclic or polycyclic ring having, optionally, one or more further heteroatoms; R is hydrogen, C1-C4 alkyl or C1-C4 alkoxy, and (CnH2n+1)--C--(CmH2m+1) is a tert-alkylene group, wherein n and m are integers from 1 to 5.

Krongauz discloses the compounds impart a yellow to blue colors.

Krongauz does not disclose using the compound in a cosmetic composition.

Lagrange discloses a cosmetic composition comprising a photo chromic compound. LaGrange discloses the photo chromic compounds are compounds which have the property of changing color when they are irradiated with a light source and

then regaining their initial color when the irradiation stops (column 1, lines 43-46) The composition can be in any cosmetically acceptable pharmaceutical form, such as in the form of a lotion, suspension, dispersion or solution in aqueous-alcoholic or solvent medium, which may be multi-phasic; in the form of a gel, a mousse, a spray, an oil-in-water, water-in-oil or multiple emulsion; in the form of a free, compact or cast powder; in the form of an anhydrous solid or paste (column 3, lines 46-54).

The photo chromic coloring agent is present in the amount of 0.05-30% by weight (column 6, lines 27-28). The composition also contains a cosmetically acceptable medium (column 6, lines 34-35). A fatty phase may be present comprising oils of animals, plants, mineral or synthetic origin, waxes of animal, plant, mineral, or synthetic origin, pasty fatty substances, gums, or mixtures thereof (column 6, lines 46-52). Volatile oils may also be present, such as cyclic volatile silicones, cyclocopolymers, and linear volatile silicones; non volatile oils may be used, such as poly(C1-C20) alkylsiloxanes, silicones modified with aliphatic or aromatic groups, phenylsilicones, oils of animal plant, or mineral origin, fluoro oils and perfluoro oils (column 6, line 54-column 7, lines 64).

The aqueous phase can comprise from 0% to 14% by weight, relative to the total weight of the aqueous phase, of a C2-C6 lower monoalcohol and/or of a polyol such as glycerol, butylene glycol, isoprene glycol, propylene glycol or polyethylene glycol (column 8, lines 54-58).

When the composition is in the form of an emulsion, it can also comprise a surfactant, in an amount of from 0.01 to 30% by weight relative to the total weight of the

composition (column 8, lines 59-63). The composition can also comprise one or more thickeners in concentrations ranging from 0 to 6% by weight, relative to the total weight of the emulsion (column 9, lines 45-48).

The composition can also comprise a film-forming polymer. The polymers can be dissolved or dispersed in the cosmetically acceptable medium. In particular, the polymer can be present in the form of a solution in an organic solvent or in the form of an aqueous dispersion of film-forming polymer particles (column 10, lines 4-12).

The composition can also comprise a particulate phase, which can comprise pigments and/or pearlescent agents and/or fillers usually used in cosmetic compositions (column 10, lines 65-68). The fillers, which can be present, are in a proportion of from 0 to 30% by weight (column 11, lines 34-35). Pigments include white or colored, inorganic or organic particles intended to color or opacify the composition (column 11, lines 1-2), iridescent particles which reflect light (column 11, lines 8-9), and lakes and dyes (column 11, lines 16-25).

The instant claims differ from the references only in the specific percentage selected for the compositions. However, It would have been deemed prima Facie obvious to one having ordinary skill in the art at the time of the invention to optimize the percentage of each component, to prepare a composition containing a photo chromic dye for application as a cosmetic composition because the determination of a specific percentage having the optimum therapeutic effect is well within the level of one having ordinary skill in the art, and the artisan would be motivated to determine optimum amounts to get the maximum effect of the active compounds. Therefore, the invention

as Whole has been prima face obvious to one of ordinary skill in the art at the time the invention was made.

Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krongauz et al. (US Patent 6,627121) in view of Lagrange (US Patent 6,123,952) and further in view of Polonka et al. (US Patent 6,369,147).

The combined teachings of Krongauz and Lagrange are discussed above and applied in the same manner.

The combined teachings do not disclose the use of a goniochromatic coloring agent.

Polonka discloses a metallic effect pigment comprising an instant effect pigments have a high gloss, attractive goniochromatic shifts generally with a high dark flop effect, as well as surprisingly vivid, saturated colors and a good hiding power (column 4, lines 7-10). For producing a mixed interference/absorption effect pigment, the metal oxide of dielectric layer is a colored oxide or colored mixed oxide of elements of groups 5 to 12 (column 4, lines 43-46). For producing a pure interference effect pigment, the metal oxide of dielectric layer (c) is preferably a substantially colorless oxide of an element of groups 3 or 4 (column 4, lines 60-63).

The instant claims differ from the references only in the specific percentage selected for the compositions. However, It would have been deemed prima Facie obvious to one having ordinary skill in the art at the time of the invention to optimize the percentage of each component, to prepare a composition containing a photo chromic

dye and a goniochromatic dye for application as a cosmetic composition because the determination of a specific percentage having the optimum therapeutic effect is well within the level of one having ordinary skill in the art, and the artisan would be motivated to determine optimum amounts to get the maximum effect of the active compounds. Therefore, the invention as Whole has been prima face obvious to one of ordinary skill in the art at the time the invention was made.

It would have been obvious to a person of ordinary skill in the art to incorporate the goniochromatic dye disclosed by Polonka into the composition taught by Krongauz and Lagrange in order to obtain a cosmetic composition in which the effect pigment particles incorporated therein will, within the coating, align themselves parallel to the surface so that the colored paint surface, when illuminated by a fixed white light source may display different colors or will appear to have an iridescent color depending on the viewing angle (column 1 ,lines 7-15).

Conclusion

No claims are allowable. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa S. Mercier whose telephone number is (571) 272-9039. The examiner can normally be reached on 7:30am-4pm Mon through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MSMercier

/ Kishore

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